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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,383	07/23/2003	Christopher A. Adkins	2002-0527.02	2361

21972 7590 08/16/2005

LEXMARK INTERNATIONAL, INC.  
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EXAMINER

AUGUSTIN, EVENS J

ART UNIT PAPER NUMBER

3621

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/625,383

Applicant(s)

ADKINS ET AL.

Examiner

Evens Augustin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 6/9/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

This is in response to an amendment file on June 9<sup>th</sup>, 2005 for letter for patent filed on May 3<sup>rd</sup>, 2004. Claims 1-90 are pending in the letter.

***Response to Arguments***

1. Applicant's arguments filed June 9<sup>th</sup>, 2005 have been fully considered but they are not persuasive.

Applicant argues that the prior arts fail to teach an inventive concept of licensing imaging substance/toner and monitoring toner level and refilling/replenishing toner once the toner cartridge falls below a particular level. The office respectfully disagrees with applicant's characterization of the prior arts' inventive concept. Applicant argues against the references individually. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The principal enabler of the claimed invention is the ability to monitor the amount of toner being used/remaining in the system and to take corrective actions if the remaining amount falls below a particular threshold. The corrective action may be to replenish the toner cartridge with a licensed surplus amount. The system performs due diligence by checking to ensure that proper licensing are being administered. Takemo teaches a toner licensing system that monitors the quantity level of the toner, and if the level falls below a particular threshold (page 15, paragraphs 240-241, page 5, paragraph 98), the system takes corrective actions (page 10, paragraph 175). The office considers the type of corrective actions that can be taken as a design

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change in the system. Ruder discloses a system that has an ink reservoir (surplus), which can be replenished, once the ink quantity falls below a particular threshold (column 1, lines 6-9). The replenishment is accomplished automatically, without the need of complex control system or operator (page 10, column 15-17). The replenishment is made possible by the system's ability to monitor the level of the ink, and take actions via replenishing if the amount of ink is below a particular threshold.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(b) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24, 29-54, 59-70 and 75-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (U.S 20020012541) over Ruder (U.S 4,967,207)

As per claims 1-24, 29-54, 59-70 and 75-86, Takemoto et al. discloses a method comprising of:

- Image forming apparatus with licensed cartridge/toner (page 7, paragraph 124)
- Communicating to a license generating server identification information (page 9, paragraph 151). Since the server stores the identification information and makes use of

it, it is inherent that the server contains a database. The identification information can be in the form of a serial number (page 8, paragraph 140)

- Receiving from the server license information from the server (page 10, paragraph 169).  
The license information is the form of a encryption key (page 17, paragraph 266)
- Comparing license information with license information stored in the ink cartridge, and reconcile the information (page 11, paragraph 181, page 17, paragraph 268)
- Determining if the toner level has fallen below a predetermined threshold (page 15, paragraphs 240-241, page 5, paragraph 98)
- The comparing of license information is performed by cartridge/printer (page 11, paragraph 181, page 10, paragraphs 170-175)
- Communicating to the user the status of the transaction and prompting the user for identification related information in a repeated fashion (page 14, paragraphs 223-226)
- The transaction is terminated if license/identification information can not be reconciled (page 10, paragraph 175)
- The comparison of the license/identification information is done between the printer and cartridge (page 11, paragraphs 181-186)
- Printer transmitting the serial number to the server (page 8, paragraph 149)
- Server transmitting the license (verification) information (page 13, paragraph 207)
- Reconciling license information with the printer/toner (page 11, paragraph 181)
- Associating memory with the cartridge (page 14, paragraph 223)
- Comparing identification/serial number in the server to establish a corresponding license information (page 9, 151)

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- The printer module also contains memory (page 9, paragraph 158)

Takemoto et al. did not explicitly describe a method that uses a surplus of toner to refill the cartridge. However, Ruder discloses a system that has an ink reservoir (surplus), which can be allocated during normal operation (column 1, lines 6-9). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to use to allocate a surplus of toner/ink in order to increase the amount of toner/ink available in a printer, and to also to provide more toner/ink and not unduly increase the cost and complexity of the printer (column 2, lines 38-45).

4. Claims 25-28, 55-58, 71-74 and 87-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (U.S 20020012541) over Simon Robert (U.S US 6,816,968) Takemoto et al. did not explicitly describe a method that uses HMAC algorithm. However, Simon Robert discloses a system that uses HMAC algorithm (column 57, line 63). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to use HMAC algorithm because it is a proven and secure way of transmitting information in an unreliable medium (column 13, lines 29-39).

### *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evens Augustin whose telephone number is 571-272-6860. The examiner can normally be reached on Monday thru Friday 8 to 5 pm.

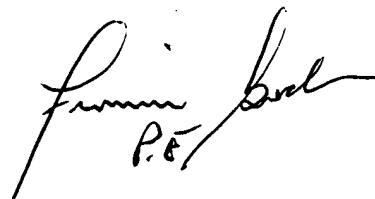
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammel can be reached on 571-272-6712.

Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-6584.

Evens J. Augustin  
August 8, 2005  
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A handwritten signature in black ink, appearing to read "Evens Augustin", with "P.E." written below it.

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